Change No. 2

FM 3-90-1, C2
Headquarters
Department of the Army
Washington, DC, 13 April 2015

Offense and Defense
Volume 1

1. Change 2 to FM 3-90-1, 22 March 2013, adds the supersession statement from page i to the cover.
2. Amends the definition for *fire support coordination line*.
3. Replaces coordination point with contact point.
4. Replaces reconnaissance and surveillance with information collection.
5. A number sign (#) marks new material.
6. FM 3-90-1, 22 March 2013, is changed as follows:

Remove Old Pages	**Insert New Pages**
cover page	cover page
pages i through ii	pages i through ii
pages 2-13 through 2-14	pages 2-13 through 2-14
pages 5-9 through 5-10	pages 5-9 through 5-10
pages 7-1 through 7-2	pages 7-1 through 7-2
pages 9-3 through 9-4	pages 9-3 through 9-4
pages A-9 through A-10	pages A-9 through A-10
pages A-27 through A-28	pages A-27 through A-28
pages Glossary-9 through Glossary-10	pages Glossary-9 through Glossary-10
pages Index-3 through Index-6	pages Index-3 through Index-6

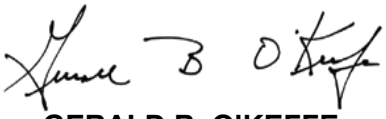
7. File this transmittal sheet in front of the publication for reference purposes.

FM 3-90-1, C2
13 April 2015

By order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:



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HEADQUARTERS, DEPARTMENT OF THE ARMY

Field Manual
No. 3-90 Volume 1

Headquarters
Department of the Army
Washington, DC, 22 March 2013

Offense and Defense

Volume 1

Contents

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2-69. The size of the reconnaissance force is based on the available intelligence about the size of enemy forces in the AO and the size of the AO in terms of both the geographical size and the size of the civilian population contained in that AO. The less known about the situation, the larger the reconnaissance force. The reconnaissance force typically consists of scout, infantry, aviation, and electronic warfare assets. The fixing force must have enough combat power to isolate the enemy forces once the reconnaissance force finds them. The finishing force is normally the main body of that echelon. It must have enough combat power to defeat those enemy forces expected to be located within the AO. The commander can direct subordinate units to retain their own finishing force, or the commander can retain direct control of the finishing force. The commander may rotate subordinate elements through the reconnaissance, fixing, and finishing roles. However, rotating roles may require a change in task organization and additional time for training and rehearsal.

CONTROL MEASURES FOR A SEARCH AND ATTACK

2-70. #The commander establishes control measures that allow for decentralized actions and small-unit initiative to the greatest extent possible. The minimum control measures for a search and attack are an AO, target reference points (TRPs), objectives, checkpoints, and contact points. (See figure 2-4.) The use of TRPs facilitates responsive fire support once the reconnaissance force makes contact with the enemy. The commander uses objectives and checkpoints to guide the movement of subordinate elements. Contact points indicate a specific location and time for coordinating fires and movement between adjacent units. The commander uses other control measures, such as phase lines and named areas of interest (NAIs), as necessary. (See appendix A for a discussion of these common control measures.)

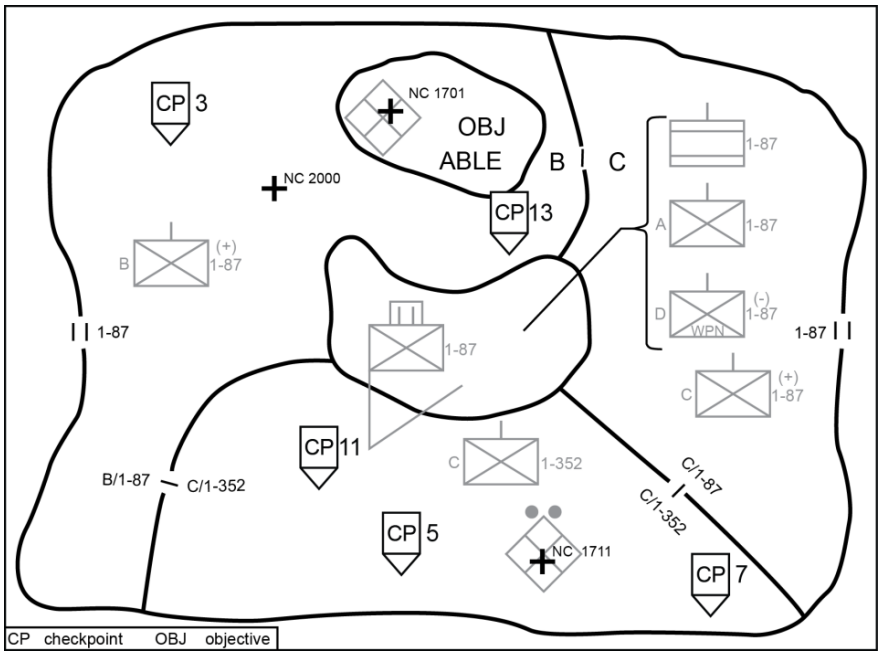

Figure 2-4. Search and attack control measures

PLANNING A SEARCH AND ATTACK

2-71. A commander conducts a search and attack for one or more of the following purposes:

- Destroy the enemy: render enemy units in the AO combat-ineffective.
- Deny the area: prevent the enemy from operating unhindered in a given area; for example, in any area the enemy is using for a base camp or for logistics support.

- Protect the force: prevent the enemy from massing to disrupt or destroy friendly military or civilian operations, equipment, property, and key facilities.
- Collect information: gain information about the enemy and the terrain to confirm the enemy COA predicted as a result of the IPB process.

2-72. The products of the IPB process are critical to conducting a search and attack. They focus the force's reconnaissance efforts on likely enemy locations.

2-73. The search and attack plan places the finishing force, as the decisive operation, where it can best maneuver to destroy enemy forces or essential facilities once located by reconnaissance assets. Typically, the finishing force occupies a central location in the AO. However, the mission variables of METT-TC may allow the commander to position the finishing force outside the search and attack area. The commander weights this decisive operation or main effort by using priority of fires and assigning priorities of support to available combat multipliers, such as engineer elements and helicopter lift support. The commander establishes control measures as necessary to consolidate units and concentrate the combat power of the force before the attack. Once the reconnaissance force locates the enemy, the fixing and finishing forces can fix and destroy it. The commander also develops a contingency plan in the event that the reconnaissance force is compromised.

2-74. Fire support plans must provide for flexible and rapidly delivered fires to achieve the commander's desired effects throughout the AO. The commander positions fire support assets so they can support subordinate elements throughout the AO. The commander must establish procedures for rapidly clearing fires. To clear fires rapidly, command posts and small-unit commanders must track and report the locations of all subordinate elements. Because of the uncertain enemy situation, the commander is careful to assign clear fire-support relationships.

EXECUTING A SEARCH AND ATTACK

2-75. Each subordinate element operating in its own AO is tasked to destroy the enemy within its capability. Units may enter the AO by infiltrating as an entire unit and then splitting out (see figure 2-5) or by infiltrating as smaller units via ground, air, or water. The commander should have in place previously established control measures and communications means between any closing elements to prevent fratricide and friendly fire incidents. The reconnaissance force conducts a zone reconnaissance to reconnoiter identified NAIs.

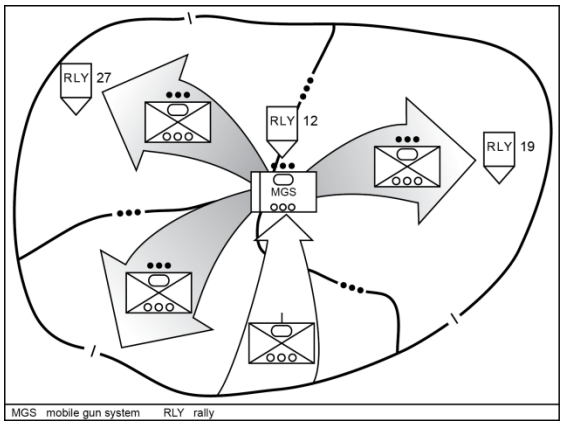

Figure 2-5. Company search and attack

2-76. Once the reconnaissance force finds the enemy force, the fixing force develops the situation and executes one of two options based on the commander's guidance and the mission variables of METT-TC. The first option is to block identified routes that the detected enemy can use to escape or rush reinforcement over. The fixing force maintains contact with the enemy and positions its forces to isolate and fix the enemy before the finishing force attacks. The second option is to conduct an attack to fix the enemy in its current positions until the finishing force arrives. The fixing force attacks if attacking meets the commander's intent and if it can generate sufficient combat power against the detected enemy. Depending on the enemy's mobility and the likelihood of the reconnaissance force being compromised, the commander may need to position the fixing force before the reconnaissance force enters the AO.

2-77. Brigade combat teams (and possibly battalions) may establish fire-support bases as part of the operations of their fixing force to provide fire-support coverage throughout the area of operations during search and attack operations conducted in complex terrain. These positions should be mutually supporting and prepared for all-around defense. They are located in positions that facilitate aerial resupply. The development of these positions depends on the mission variables of METT-TC because their establishment

destroy the retrograding enemy force. These actions of the force providing direct pressure may or may not be in conjunction with the actions of any encircling force.

5-37. The overall pursuit commander does everything possible to place a force behind a retrograding enemy to encircle and trap the bulk of that enemy force between the encircling force and the force providing direct pressure. The force providing direct pressure maintains enough pressure on the retrograding enemy force so that the encircling force can envelop it. To envelop the enemy, the force providing the direct-pressure force must be strong enough to overcome any enemy rear guard before the enemy's main body can complete its retrograde and reestablish a coherent defense. Once in its objectives, the force conducting the encirclement defends or attacks as necessary, responding to the enemy's actions and those of the force providing direct pressure to complete the enemy's geographic isolation.

5-38. A pursuing force must not give an enemy force time to reorganize for an all-around defense after it is encircled. If the enemy forms a perimeter, the pursuing commander must repeatedly split it into smaller elements until the encircled enemy force is destroyed. If time is not critical, the commander can keep the encirclement closed, defeat enemy breakout attempts, and weaken the enemy by fires alone. The commander can greatly accelerate the collapse of a large, encircled enemy force by using psychological operations, precision-guided weapons, and improved conventional munitions in mass. (FM 3-90-2 describes the tactics associated with the reduction of an encircled enemy force.) If the resulting encirclement does not destroy the retrograding enemy force, the commander conducts additional pursuit operations until the enemy is destroyed.

FOLLOW THROUGH

5-39. Once the commander initiates a pursuit, it is continued until a higher commander terminates the pursuit. Conditions under which a higher commander may terminate a pursuit include the following:

- The pursuing force annihilates or captures the enemy and resistance ceases.
- The pursuing force fixes the enemy for follow-on forces.
- The higher commander makes an assessment that the pursuing force is about to reach a culminating point.

5-40. A commander often transitions from a pursuit into other types of offensive and defensive actions. If the enemy attempts to reorganize, forces conducting a pursuit execute hasty attacks. They conduct an exploitation to capitalize on the success of these attacks and then move back into pursuit. Forces conducting a pursuit may also transition into a defense, if the pursuing force reaches a culminating point. This usually occurs when the enemy introduces strong reinforcements to prepare for a counteroffensive. If the pursuit is totally successful and the enemy is destroyed, the pursuing force may need to transition to a focus on the conduct of stability tasks. (See ADRP 3-07.)

#PURSUIT DURING OTHER THAN MAJOR OPERATIONS

5-41. The transition to retrograde operations by unconventional enemies may make it more difficult for tactical units to engage, capture, or kill enemy fighters during the conduct of pursuit operations in other than major combat operations. Successful pursuit of unconventional enemies in these situations relies on maintaining contact through surveillance assets, patrols, and host nation security forces. Since dispersing unconventional forces usually use preplanned routes of withdrawal, or if pressed simply scatter and try to blend into the local civilian population to rally later at a pre-designated point, any pursuit must be undertaken immediately both on the ground and in the air. Boundaries should not prevent the pursuit of unconventional forces into an adjacent unit's area of operations. Operations orders or other means of coordination should provide for this contingency.

5-42. Tactical leaders must recognize the potential for unconventional enemies to conduct a baited ambush during their retrograde operations. Critical to mitigating risk to friendly forces during a pursuit is maintaining one of the eight forms of contact—direct; indirect; nonhostile or civilian; obstacle; chemical, biological, radiological, and nuclear (CBRN); aerial; visual; and electronic—and positioning of adjacent units. These adjacent units may include aviation, host nation security forces, surveillance assets, other ground forces, and quick response forces (QRFs).

5-43. Unconventional enemies may establish base camps and conduct cross-border operations from countries adjacent to the host country. They take advantage of an international boundary to launch operations or to evade pursuit. Commanders operating in border areas must respect the sanctity of international boundaries. However, they can conduct combat operations against the insurgent force once the unconventional enemy force crosses back over the border. Ambush patrols and area ambushes are excellent means of dealing with unconventional enemy forces who try to use an international border as a sanctuary.

5-44. Unconventional enemies should know that every ambush they execute may result in rapid, violent, and relentless pursuit by friendly forces. Such action, executed automatically as a matter of first priority, is most important to the overall effort to reduce the effectiveness and frequency of ambushes by unconventional enemies. First, it ensures an early relief of the ambushed unit; second, it increases the possibility of friendly forces making contact with the ambush party before it disperses; third, it reduces the time available to the unconventional enemy to destroy the ambushed forces and to loot vehicles; and, finally, successful pursuit operations will improve the morale of friendly units while having a corresponding opposite effect upon unconventional enemy forces. Commanders must initiate pursuits of ambush forces with the least possible delay, with only that degree of caution required to prevent falling into a larger ambush.

Chapter 7

The Area Defense

An area defense capitalizes on the strength inherent in a closely integrated defensive organization on the ground. The conduct of an area defense facilitates the consolidation and reconstitution of forces in order to transition to a focus on another element of decisive action, such as stability. The commander may assign subordinate units the task of conducting an area defense as part of their mission. Subordinate echelons defend within their assigned areas of operations (AOs) as part of the larger-echelon's operation.

GENERAL CONSIDERATIONS FOR AN AREA DEFENSE

7-1. A commander conducts an area defense when the following conditions occur:

- When directed to defend or retain specified terrain.
- When the commander cannot resource a striking force.
- The forces available have less mobility than the enemy.
- The terrain affords natural lines of resistance and limits the enemy to a few well-defined avenues of approach, thereby restricting the enemy's maneuver.
- There is enough time to organize the position.
- Terrain constraints and lack of friendly air superiority limit the striking force's options in a mobile defense to a few probable employment options.
- Conditions require the preservation of forces when transitioning from a focus on the conduct of offensive tasks to stability tasks and when offensive actions are superfluous to the mission.

7-2. The commander conducting an area defense combines static and mobile actions to accomplish the mission. Static actions usually consist of fires from prepared positions. Mobile actions include using the fires provided by units in prepared positions as a base for counterattacks and repositioning units between defensive positions or forward operating bases when the operation is focused on the conduct of stability tasks. The commander can use the reserve and uncommitted forces to conduct counterattacks and spoiling attacks to desynchronize the enemy forces or prevent them from massing.

ORGANIZATION OF FORCES FOR AN AREA DEFENSE

7-3. #The commander organizes the defending force to accomplish information collection, security, main battle area (MBA), reserve, and sustainment missions. The commander has the option of defending forward or defending in depth. When the commander defends forward within an AO, the force is organized so that most of the available combat power is committed early in the defensive effort. To accomplish this, the commander may deploy forces forward or plan counterattacks well forward in the MBA or even beyond the MBA. If the commander has the option of conducting a defense in depth, security forces and forward MBA elements are used to identify, define, and control the depth of the enemy's main effort while holding off secondary thrusts. This allows the commander to conserve combat power, strengthen the reserve, and better resource the counterattack.

#INFORMATION COLLECTION

7-4. #The commander directs information collection assets to determine the locations, strengths, and probable intentions of the attacking enemy force before and throughout the defense. The commander places a high priority on early identification of the enemy's main effort. The commander may need to complement

surveillance with combat actions that test enemy intentions. Fighting for information can have two benefits—it can force the enemy to reveal intentions and disrupt enemy preparations.

7-5. In the defense, reconnaissance and surveillance operations overlap the unit's planning and preparing phases. Leaders performing reconnaissance and surveillance tasks must understand that they often deploy before the commander fully develops the plan. These leaders must be responsive to changes in orientation and mission. The commander ensures that the staff fully plans, prepares, and assesses the execution of the intelligence portion of the overall plan.

SECURITY

7-6. The commander balances the need to create a strong security force to shape the battle with the resulting diversion of combat power from the main body's decisive operation. The commander usually allocates security forces to provide early warning and protect those forces, systems, and locations necessary to conduct the decisive operation from unexpected enemy contact. On a battlefield where forces are contiguous with one another, the location of security forces is usually in front of the main defensive positions. On a noncontiguous battlefield they are located on avenues of approach between the protected force and known or suspected enemy locations.

7-7. Maneuver battalion and brigade combat team (BCT) security forces normally conduct screen or guard missions. At division level and above, the commander may use a covering force. A division commander may elect to have the security force conduct a guard mission, if a corps covering force exists. Because an area security mission usually ties in closely with flank units, flank security forces are needed if there are gaps on the unit's flanks, which occurs during noncontiguous operations, or if gaps develop during the operation. A flank screen or guard is critical if an enemy avenue of approach into the defended area from the flanks could be uncovered during the defense. A commander does not normally assign a force the mission of conducting rear guard or rear cover during contiguous operations, since it is unlikely that the force's support area will become uncovered during the defense. The commander resources echelon support area security forces, to include a tactical combat force (TCF) or accepts the risk to the sustainment effort of not performing this function.

MAIN BATTLE AREA

7-8. The commander builds the decisive operation around identified decisive points, such as key terrain or high-payoff targets. The commander's decisive operation in an area defense focuses on retaining terrain by using fires from mutually supporting, prepared positions supplemented by one or more counterattacks and the repositioning of forces from one location to another. The commander's decisive operation normally involves close combat since an area defense emphasizes terrain retention.

7-9. The commander normally positions the echelon's main body—the bulk of combat power—within the MBA where the commander wants to conduct the decisive operation. The commander organizes the main body to halt, defeat, and ultimately destroy attacking enemy forces. The majority of the main body deploys into prepared defensive positions within the MBA. However, mobile elements of the force are ready to deploy where and when needed.

RESERVE

7-10. The commander's defensive plan should be able to succeed without using the reserve. However, the most likely mission of the reserve is to conduct a counterattack in accordance with previously prepared plans. Lower-echelon commanders use their reserves primarily to conduct local counterattacks to restore the integrity of their defense or to exploit opportunities. A senior commander uses the reserve to seize the initiative from the enemy when the opportunity presents itself. For example, a corps commander may target the effects of the corps reserve against enemy fire support and follow-on forces to produce that effect.

7-11. The reserve is not a committed force. The commander can assign it a wide variety of tasks on its commitment, and it must be prepared to perform other missions. In certain situations, it may become necessary to commit the reserve to restore the integrity of the defense by blocking an enemy penetration or reinforcing fires into an engagement area (EA). These secondary tasks include—

9-11. The extended frontages and ranges common to retrograde operations make the provision of fire support difficult and limit the commander's ability to mass fires. Therefore, retrograde forces, especially delay forces, often have more than the normal allocation of fire support assets. The commander's risk of losing supporting artillery systems and their ammunition also increases when conducting retrograde operations. Therefore, the commander balances the decision to commit fire support systems forward against anticipated requirements in subsequent battle stages. In particular, the commander protects towed artillery systems from being overrun by a mobile enemy. The commander can use available rotary- and fixed-wing aircraft to augment or replace artillery systems.

9-12. Functional and multifunctional support and sustainment assets are widely dispersed and often attached to the units they support because of the width of the AOs normally assigned in a delay. Engineer priorities are normally countermobility first, then mobility. However, restrictive terrain that impedes friendly movement may require the commander to reverse priorities. Close coordination is necessary so that engineer obstacles are covered by fire and do not impede the planned withdrawal routes of delaying forces or the commitment of a counterattacking reserve force. The delaying force should have a greater-than-normal allocation of fire support systems to include Service and joint aviation to allow the delay force to break contact if necessary.

9-13. The requirement to maintain continuous support during the delay requires sustainment organizations to echelon their assets throughout the area where the retrograde will take place. This echeloning, coupled with the wide dispersion of combat forces that is inherent in a delay, complicates the conduct of the delay.

CONTROL MEASURES

9-14. #The delay consists of a series of independent small-unit actions that occur simultaneously across the front. Subordinate commanders must have freedom of action. The tactical mission graphic for the delay appears in figure 9-1. It is not a control measure. Tactical mission graphics are used by planners developing different courses of action. The control measures used in the delay are the same as those introduced in chapter 8. Common graphics used in a delay include AOs, PLs, battle positions (BPs), contact points, checkpoints, EAs, trigger lines, target reference points (TRPs), and disengagement lines. (See figure 9-2 on page 9-4.) The commander designates contact points in front of, between, and behind units to assist coordination, ensure continuity of the delay, and draw attention to enemy avenues of approach into unit flanks. (FM 3-90-2 addresses the use of passage points within its discussion of the tactics associated with the conduct of a passage of lines.)

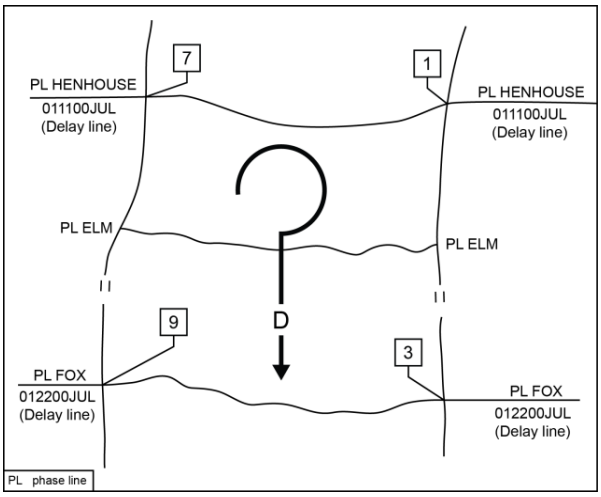

Figure 9-1. Delay tactical mission graphic

9-15. In planning for a delaying action, the commander assigns an AO to each committed unit down through the company or troop level. The commander assigns each likely enemy avenue of approach to only one subordinate unit when designating subordinate units' AOs. When the commander draws the boundaries of these subordinate AOs, terrain that controls fire and observation into those areas is included.

9-16. The commander designates additional PLs beyond those established by the higher commander as necessary to control the unit's movement during the delay. **A *delay line* is a phase line where the date and time before which the enemy is not allowed to cross the phase line is depicted as part of the graphic control measure**. Designating delay lines is a command decision that imposes a high degree of risk on the delaying unit. The delaying unit must do everything in its power—including accepting decisive engagement—to prevent the enemy from crossing that line before the time indicated. A delay line may also be event driven. For example, a commander can order a delaying unit to prevent penetration of the delay line until supporting engineers complete construction of a rearward obstacle belt.

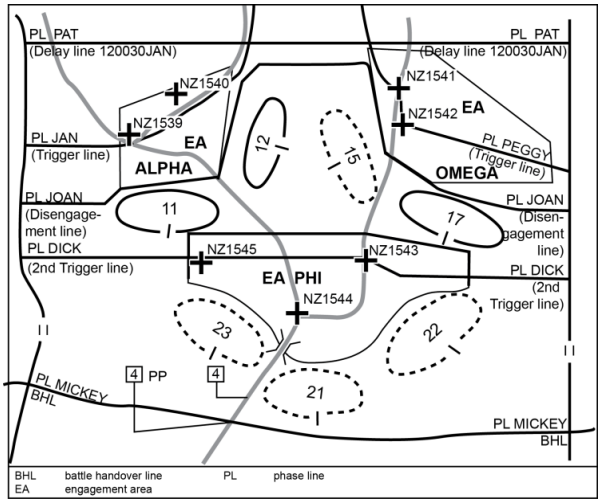

Figure 9-2. Control measures for a delay

PLAN

9-17. Unit commanders and their Soldiers must understand and exercise the basic defensive tactics outlined in chapter 6 to conduct a successful delay. However, these defensive basics have unique considerations, and the significance of these considerations varies depending on the mission variables of METT-TC. In a delay, units operate on extended frontages at great risk from advancing enemy forces. The tactical situation constantly changes with opportunities for maneuver existing for only extremely short periods. Subordinate commanders must have the flexibility to take immediate action to retain the integrity of their forces. This helps retain their freedom of maneuver and inflict maximum destruction on the enemy.

9-18. The commander identifies ground and air avenues for enemy attacks and friendly counterattacks. When avenues of approach diverge or pass from one AO to another, adjacent units must coordinate with each other. Using the intelligence preparation of the battlefield process, the commander designates initial and subsequent delay positions on key terrain that covers likely enemy avenues of approach throughout the depth of the AO allocated to the delay mission.

9-19. The commander of the delaying force must maintain a mobility advantage over the attacker to successfully conduct a delay. Robust engineering and fire support are critical to this effort. The commander maintains this advantage by fully utilizing the mobility inherent in the combat and tactical systems available to the delaying force. In addition, the commander takes other steps to enhance friendly mobility and degrade the enemy's mobility, such as building combat trails between delaying positions and preparing bridges over major rivers for demolition. The delaying force should be capable of constructing large numbers of obstacles and delivering long-range fires. For example, while the enemy travels in movement formations that allow the enemy force to quickly press its attack, the delaying force's aim is to engage the enemy as early and often as possible. This forces the enemy out of those formations through a multiple series of time-consuming deployments into assault formations.

9-20. Air defense of a delaying force has three main considerations—the protection of the force while it is in position, the protection of any forces left in contact, and the protection of the force as it moves to the rear. Priority should be toward maintaining the mobility of the force. Air defense assets remain mobile yet able to engage aerial targets with little advance warning. These assets should work in teams, able to move to the rear in alternating bounds. This ensures that dedicated air defense assets will always be in position, with the flexibility needed to keep pace with the operations. These firing points are not obvious positions that an enemy would target as part of preparatory or supporting fires. Early warning of enemy air attack is provided over combat net radios using the command net at the brigade echelon and below.

9-21. Flanks and gaps between units are always areas of concern. In a linear deployment, the enemy can bypass or outflank the delaying force, if coordination between adjacent friendly units is weak, or if one unit

A-29. The commander designates a PL as the trigger line for available supporting fire support systems. The commander bases the location of the trigger line on the mission variables of METT-TC, including such variables as the time of flight for artillery shells, positioning of the guns, and the existence of quick-fire links. Its location varies from situation to situation. Its position reflects the distance an enemy force is likely to traverse in the time it takes from when fires are requested to when artillery rounds impact, at a given enemy's movement speed. (See figure A-10.) This gives time for supporting fire support systems to respond to the initial call for fire. For example, in a desert environment—for enemy forces traveling at speed X, a battalion task force commander's fire support trigger line is approximately four kilometers beyond the point where the commander wants to engage the enemy with indirect fires when M109A6 howitzers are in direct support. It is approximately six kilometers when M109A3 howitzers are in direct support. The shorter distance reflects the generally more rapid response capabilities of the M109A6.

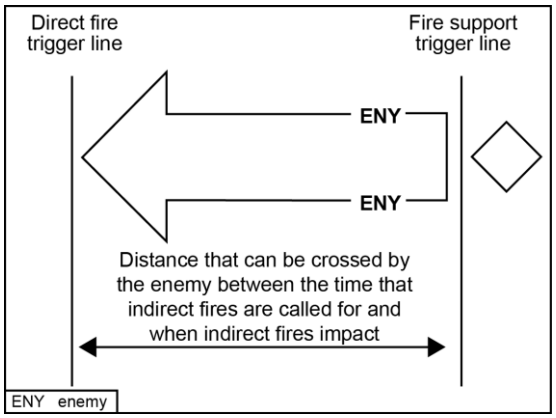

Figure A-10. Trigger line examples

A-30. The commander can establish another trigger line for the unit's most accurate long-range weapon system in the vicinity of the area where the fire support impacts to capitalize on the asymmetric attack. However, dust and debris resulting from the artillery fire may prevent direct-fire systems from engaging the enemy. The commander establishes other trigger lines and TRPs for shorter-range systems. The commander may give guidance to extremely proficient crews to engage the enemy at longer than normal ranges or give them different engagement priorities than the rest of the force, such as giving priority to engaging air defense or engineer-breaching systems.

A-31. When the enemy reaches these closer trigger lines, the commander establishes a decision point to help force a determination on whether the commander wants available longer-range systems to continue to fire in depth or to concentrate unit fires on a single point. Many factors impact this decision, most of which concern the enemy and how the enemy maneuvers and the effects of the defending force's fires.

FIRE SUPPORT COORDINATION MEASURES

A-32. Commanders assigned an AO employ fire support coordination measures (FSCMs) to facilitate rapid target engagement and simultaneously provide safeguards for friendly forces. FSCMs are either permissive or restrictive. Boundaries are the basic FSCM. The fire support coordinator recommends FSCMs to the commander based on the commander's guidance, location of friendly forces, scheme of maneuver, and anticipated enemy actions. Once established, they are entered into or posted on all the command's displays and databases. (ADRP 3-09 explains the use of all FSCMs in more detail).

Permissive Fire Support Coordination Measures

A-33. The primary purpose of permissive measures is to facilitate the attack of targets. Once they are established, further coordination is not required to engage targets affected by the measures. Permissive FSCMs include a coordinated fire line (CFL), a fire support coordination line (FSCL), and a free-fire area (FFA).

Coordinated Fire Line

A-34. A *coordinated fire line* is a line beyond which conventional and indirect surface fire support means may fire at any time within the boundaries of the establishing headquarters without additional coordination. The purpose of the coordinated fire line is to expedite the surface-to-surface attack of targets beyond the coordinated fire line without coordination with the ground commander in whose area the targets are located (JP 3-09). BCTs or divisions usually establish a CFL, although a maneuver battalion may establish one. It

is located as close as possible to the establishing unit without interfering with maneuver forces to open up the area beyond the CFL to fires. A higher echelon may consolidate subordinate unit CFLs. If this occurs, any changes to the subordinate CFLs are coordinated with the subordinate headquarters. (See figure A-11.)

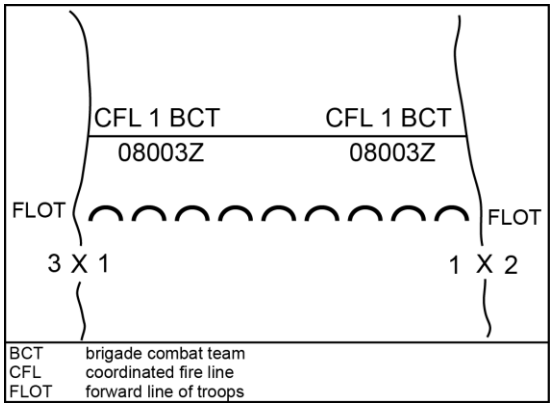

Figure A-11. 1st Brigade combat team coordinated fire line

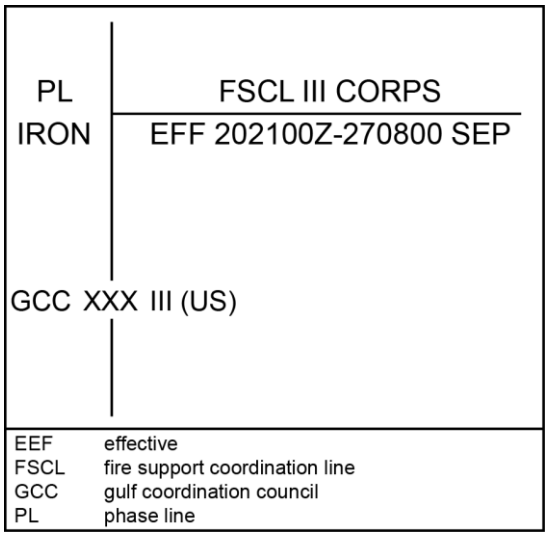

Figure A-12. III Corps fire support coordination line

Fire Support Coordination Line

A-35. #The *fire support coordination line* is a fire support coordination measure established established by the land or amphibious force commander to support common objectives within an area of operations; beyond which all fires must be coordinated with affected commanders prior to engagement, and short of the line, all fires must be coordinated with the establishing commander prior to engagement (JP 3-09). Fire support coordination lines facilitate the expeditious attack of surface targets of opportunity beyond the coordinating measure. The fire support coordination line applies to all fires of air, land, and sea-based weapon systems using any type of ammunition. Forces attacking targets beyond a fire support coordination line must inform all affected commanders in sufficient time to allow necessary reaction to avoid fratricide. Supporting elements attacking targets beyond the fire support coordination line must ensure that the attack will not produce adverse effects on, or to the rear of, the line. Short of a fire support coordination line, all air-to-ground and surface-to-surface attack operations are controlled by the appropriate land or amphibious force commander. The fire support coordination line should follow well-defined terrain features. Coordination of attacks beyond the fire support coordination line is especially critical to commanders of air, land, and special operations forces. In exceptional circumstances, the inability to conduct this coordination will not preclude the attack of targets beyond the fire support coordination line. However, failure to do so may increase the risk of fratricide and could waste limited resources. (See figure A-12.)

A-36. The commander designating a FSCL remains responsible for establishing the priority, effects, and timing of fires impacting beyond the FSCL. Coordination for attacks beyond the FSCL is through the air tasking order. The appropriate land or amphibious commander controls attacks short of the FSCL. Army commanders use the tactical air control system or the Army air-ground system to control the execution of close air support (CAS). By establishing a FSCL close-in, yet at sufficient depth so as to not limit high tempo maneuver, land and amphibious force commanders ease the coordination requirements for engagement operations within their AOs by forces not under their control, such as naval surface fire support or air interdiction.

Free-Fire Area

A-37. A *free-fire area* is a specific area into which any weapon system may fire without additional coordination with the establishing headquarters (JP 3-09). Normally, division or higher headquarters establish a FFA on identifiable terrain. (See figure A-13.)

A-98. A *strong point* is a heavily fortified battle position tied to a natural or reinforcing obstacle to create an anchor for the defense or to deny the enemy decisive or key terrain (ADRP 3-90). The commander prepares a strong point for all-around defense. (See figure A-37.) The commander positions strong points on key or decisive terrain. The unit occupying the strong point prepares positions for its weapon systems, vehicles, Soldiers, and supplies. The commander also establishes a strong point when anticipating that enemy actions will isolate a defending force retaining terrain critical to the defense.

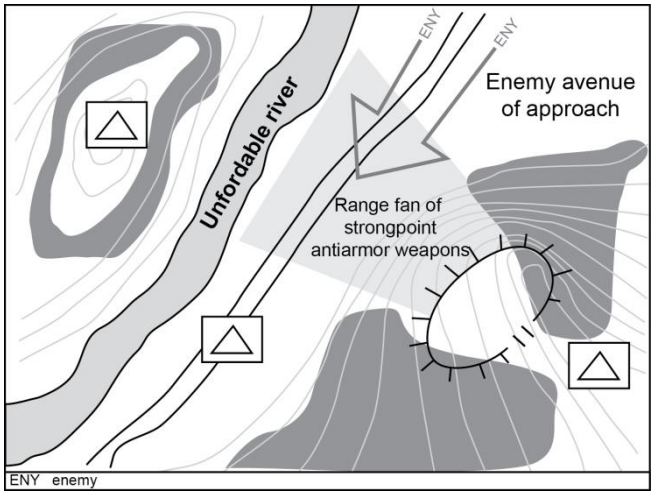

Figure A-37. Strong point defense

A-99. Before assigning a strong point mission, the commander ensures that the strong point force has sufficient time and resources to construct the position, which requires significant engineer support. A minimally effective strong point typically requires a one-day effort from an engineer unit the same size as the unit defending the strong point. Normally, companies and battalions occupy strong points, although brigades may construct them. The commander does not normally establish strong points for units smaller than company size. This is because a platoon or squad cannot secure a perimeter large enough to encompass all required assets and supplies.

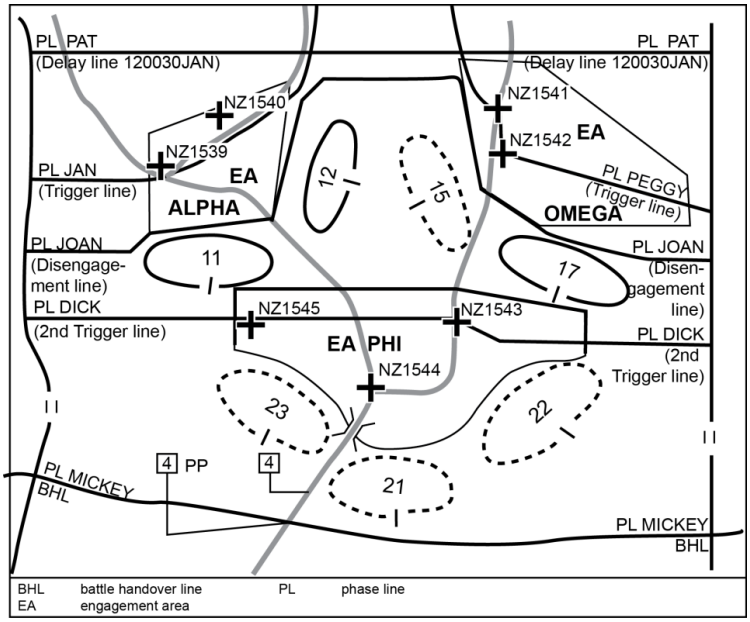

Figure A-38. Direct fire control measures

Direct Fire Control Measures

A-100. The commander engages the enemy force with all available defensive fires when it enters the defending unit's engagement area. These direct fire control measures, such as TRPs, trigger lines, and EAs, are discussed in this appendix under the heading of "common offensive control measures" in paragraphs A-27, A-28, and A-23. (See figure A-38.)

Disengagement Line

A-101. A *disengagement line* is a phase line located on identifiable terrain that, when crossed by the enemy, signals to defending elements that it is time to displace to their next position (ADRP 3-90). Phase Line JOAN is a disengagement line in figure A-39. The commander uses these lines in the delay and the defense when the commander does not want the defending unit to become decisively engaged. The commander establishes criteria for the disengagement, such as number of enemy vehicles by type, friendly losses, or enemy movement to flanking locations. Commanders may designate multiple disengagement lines, one for each system in the defense.

Fire Support Coordination Measures

A-102. The commander tries to engage the enemy at extended ranges and attrit the enemy force as the enemy's attack advances. To control indirect fires in the defense, the commander uses those common FSCM introduced in paragraphs A-32 through A-45. The commander can also employ final protective fires.

A-103. *Final protective fire* is an immediately available preplanned barrier of fires designed to impede enemy movement across defensive lines or areas (JP 1-02). Both direct- and indirect- fire weapons can provide FPFs. The commander can only assign each firing battery or platoon a single FPF. A FPF is a priority target for an element or system, and those fire units are laid on that target when they are not engaged in other fire missions. When the enemy force initiates its final assault into a defensive position, the defending unit initiates its FPFs to kill enemy infantry soldiers and suppress enemy armored vehicles. (Figure A-39 depicts an FPF.)

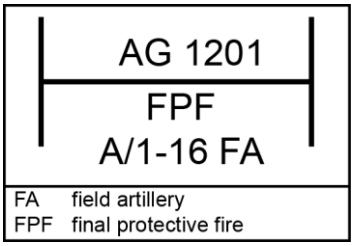

Figure A-39. Final protective fire

Forward Edge of the Battle Area

A-104. #The *forward edge of the battle area* is the foremost limit of a series of areas in which ground combat units are deployed, excluding the areas in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units (JP 3-09.3). The Army only uses a FEBA during the conduct of defensive tasks. The FEBA is not a boundary, but it conveys the commander's intent. It marks the foremost limits of the areas in which the preponderance of ground combat units deploy, excluding the areas in which security forces are operating. MBA forces can temporarily move forward of the FEBA to expedite the retrograde operations of security forces. The commander designates a FEBA to coordinate fire support and to assist in the maneuver of subordinate forces. A phase line designating the forward-most point of the MBA indicates the FEBA. The FEBA shows the senior commander's planned limit for the effects of direct fires. Defending units must address this area in their scheme of maneuver and exchange information regarding tactical plans at contact points. (Figure A-40 graphically depicts the current FEBA and a proposed FEBA.)

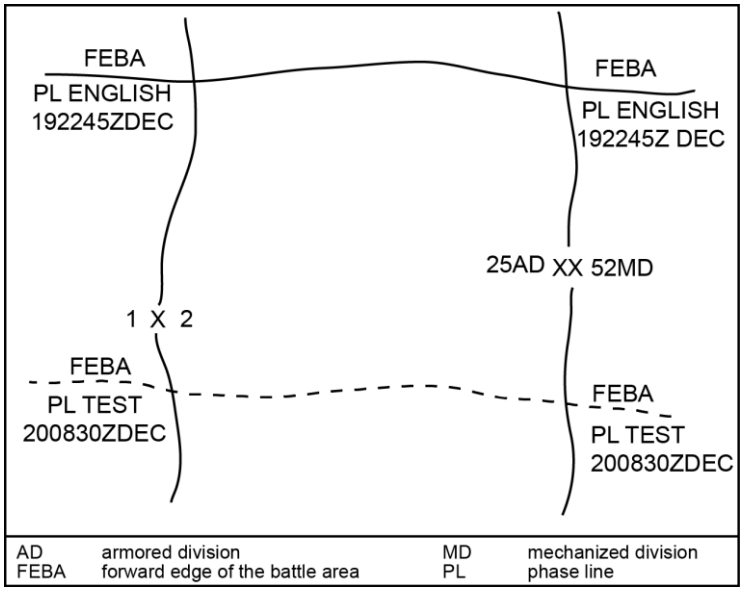

Figure A-40. Forward edge of the battle area

Main Battle Area

A-105. The *main battle area* is the area where the commander intends to deploy the bulk of the unit's combat power and conduct decisive operations to defeat an attacking enemy (ADRP 3-90). The defending commander's major advantage is the ability to select the ground on which the battle takes place. The defender positions subordinate forces in mutually supporting positions in depth to absorb enemy penetrations or canalize them into prepared EAs, defeating the enemy's attack by concentrating the effects of overwhelming combat power. The natural defensive strength of the position determines the distribution

***encircling force**

In pursuit operations, the force which maneuvers to the rear or flank of the enemy to block the enemy's escape so that the enemy can be destroyed between the direct pressure force and encircling force. This force advances or flies along routes parallel to the enemy's line of retreat. If the encircling force cannot outdistance the enemy to cut the enemy off, the encircling force may also attack the flank of a retreating enemy.

***engagement area**

Where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems.

***engagement criteria**

Protocols that specify those circumstances for initiating engagement with an enemy force.

***engagement priority**

The order in which the unit engages enemy systems or functions.

***envelopment**

A form of maneuver in which an attacking force seeks to avoid the principal enemy defenses by seizing objectives behind those defenses that allow the targeted enemy force to be destroyed in their current positions.

***exfiltrate**

A tactical mission task where a commander removes Soldiers or units from areas under enemy control by stealth, deception, surprise, or clandestine means.

exploitation

An offensive task that usually follows a successful attack and is designed to disorganize the enemy in depth. (ADRP 3-90)

feint

In military deception, an offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and/or time of the actual main offensive action. (JP 3-13.4)

***field of fire**

The area that a weapon or group of weapons may cover effectively from a given position.

final coordination line

A phase line close to the enemy position used to coordinate the lifting or shifting of supporting fires with the final deployment of maneuver elements. (ADRP 3-90)

final protective fire

An immediately available preplanned barrier of fires designed to impede enemy movement across defensive lines or areas. (JP 1-02)

***fire superiority**

That degree of dominance in the fires of one force over another that permits that force to conduct maneuver at a given time and place without prohibitive interference by the enemy.

#fire support coordination line

A fire support coordination measure established by the land or amphibious force commander to support common objectives within an area of operation; beyond which all fires must be coordinated with affected commanders prior to engagement, and short of the line, all fires must be coordinated with the establishing commander prior to engagement. (JP 3-09)

***fix**

A tactical mission task where a commander prevents the enemy force from moving any part of that force from a specific location for a specific period. Fix is also an obstacle effect that focuses fire planning and obstacle effort to slow an attacker's movement within a specified area, normally an engagement area.

***flank attack**

A form of offensive maneuver directed at the flank of an enemy.

***follow and assume**

A tactical mission task in which a second committed force follows a force conducting an offensive task and is prepared to continue the mission if the lead force is fixed, attrited, or unable to continue.

***follow and support**

A tactical mission task in which a committed force follows and supports a lead force conducting an offensive task.

forms of maneuver

Distinct tactical combinations of fire and movement with a unique set of doctrinal characteristics that differ primarily in the relationship between the maneuvering force and the enemy. (ADRP 3-90)

***forward boundary**

A boundary of an echelon that is primarily designated to divide responsibilities between it and its next higher echelon.

forward edge of the battle area

The foremost limit of a series of areas in which ground combat units are deployed, excluding the areas in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units. (JP 3-09.3)

forward line of own troops

A line which indicates the most forward positions of friendly forces in any kind of military operation at a specific time. (JP 3-03)

free-fire area

A specific area into which any weapon system may fire without additional coordination with the establishing headquarters. (JP 3-09)

***frontal attack**

A form of maneuver in which an attacking force seeks to destroy a weaker enemy force or fix a larger enemy force in place over a broad front.

***infiltration**

(Army) A form of maneuver in which an attacking force conducts undetected movement through or into an area occupied by enemy forces to occupy a position of advantage behind those enemy positions while exposing only small elements to enemy defensive fires.

***infiltration lane**

A control measure that coordinates forward and lateral movement of infiltrating units and fixes fire planning responsibilities.

#Entries are by paragraph number.

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